1Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 21.

April, 1919.

No. 244.

LONG POND.

C. A. WEATHERBY.

Professor Fernald maintains that there is especial virtue in the appellation "Long Pond"; that any body of water bearing that name is pretty sure to harbor, in or about it, desirable plants; and that a composite flora of "Long Ponds" would make interesting reading. It is as a contribution to such a work that I offer the following account of my own particular Long Pond.

In October, 1916, in the course of a tramp through the woods in the extreme northeastern corner of Connecticut, in the town of Thompson, Mrs. Weatherby and I noticed a small pond, surrounded by broad margins of swamp and producing in its shallower parts a rank growth of sedges. It looked good; and we then and there resolved to visit it again at a more favorable season for botanizing.

The immediate region in which it lies consists of low ridges and small, flat areas of sand and gravel, presumably the bars and deltas of glacial streams. The hollows between them are occupied by swamps and by two small ponds, drained by streams which flow sluggishly through wide stretches of marsh, full of *Peltandra*. One of these ponds — Little Pond — we had already visited. It has a clean sandy strand, only here and there overlaid with a thin deposit of vegetable matter, and inhabited by such characteristic plants as *Gratiola aurea*, *Cyperus dentatus*, *Juncus pelocarpus*, *Elatine minima* and, in the more mucky places, *Hydrocotyle umbellata*, *Utricularia gibba* and *Sagittaria Engelmanniana*. The swamps along its outlet were known to harbor *Rosa nitida*, *Rynchospora fusca* and *Eleocharis tuberculosa*.¹ In the maple

¹ The last two species are associated with each other and with *Panicum spretum* (which also grows in Thompson) in at least two other Connecticut swamps.

swamps between the ridges scattered individuals of tamarack and black spruce persist from an earlier growth. Some specimens of the latter are fifteen to twenty feet high — a very good size for Connecticut. Most of the plants here mentioned are noteworthy in this region: it was, therefore, with anticipations which we tried to keep prudently chastened that, in August, 1918, we at last started on our expedition to Long Pond.

War-time train service had made the locality difficult of access. The best way to reach it and have a few clear hours there seemed to be to take an afternoon train to the nearest railroad station, walk in, carrying what we needed, to an old farm clearing near the pond, spend the night in the fields there and do our botanizing the next morning. This we accordingly did. It was a novel experience for us, but proved distinctly entertaining. The one real drawback was a lack of drinking water, for finding which we had trusted to luck. By morning we were driven to a desperate attempt to collect dew from the grass, where there seemed to be enough of it to slake the thirst of an army. The attempt failed; but it led to the interesting scientific discovery that a dewdrop is by no means the crystal pure article the poets would have us believe it. On the contrary, it is a globule of incredibly dirty water: its primary function must be to relieve the atmosphere of all — positively all — its impurities.

At breakfast, we were honored by a visit from a mink, which moved about at a safe distance and barked at us. We suspected him of jeering at our waterless condition: he knew where the water was. Later we found out; and, much refreshed, began our botanizing.

Rhexia virginica grew sparingly at the edge of the clearing where we had camped. A few rods away, in the edge of the swamp, was a good-sized patch of Smilacina trifolia, a species not previously reported from Windham County. Long Pond itself, when we reached it, proved to be quite different in character from Little Pond. All around it ran a more or less broad belt of mucky swamp, grown up to a well-nigh impenetrable tangle of bushes and sedge, among which young red maples were beginning to creep in. At one point where firm ground came close to the water, a path led down to it. Here we found a boat, of the awkward flat-bottomed type usual on New England ponds, and half an oar. Fortunately, it was the business half. As no better equipment seemed available, we set forth with this, in the face of a rather lively breeze. After some three hours'

hard labor, we had succeeded in circumnavigating about half the pond — which is half a mile long — and were quite ready to go ashore and have lunch.

But the botanizing was good. Not one of the plants noted as characteristic of Little Pond was found here, the different conditions at the two being well reflected in their floras. On the black mud where the boat was drawn up was a mat of Eleocharis olivacea, not before reported from Windham County. In the shallower parts of the pond was an abundant growth of aquatics — white and yellow waterlilies, Brasenia, Nymphoides (sometimes called "fairy lily" in Connecticut), Nejas flexilis, Utricularia vulgaris, var. americana, U. purpurea in abundance and Potamogeton natans, the last two new to the county. Near the further shore, slender culms of Scirpus subterminalis and Eleocharis Robbinsii projected from the water — both likewise new to Windham County. Here also were scattered plants of Pontederia cordata, var. angustifolia. Only the variety was observed in the pond itself, though there was an abundance of the typical form along the outlet. In the edge of the marginal swamp grew many plants of a pretty and unfamiliar Aster, which we managed to collect by driving the bow of the boat (if a craft with perfectly interchangeable ends can be said to have a bow) as far as possible into the bushes, and which, on later investigation, proved to be Aster nemoralis, previously collected near Long Pond by Mr. E. B. Harger in June, 1908, but not reported because his specimens were too young for certain identification. Further along, we picked a single fruiting head of Juncus militaris, another addition to the Windham County list. Around it were numerous jointed culms which I took to be sterile plants of the Juncus. We set about hunting for more flowering or fruiting material. Presently Mrs. Weatherby remarked: "Here is a flower on one of these things." I looked around, and probably only the limitations of the boat prevented my doing something undignified. There is a keenness of pleasure in the finding of a really rare plant which one never quite outgrows. And this flower was not that of a Juneus, but of an Eleocharis and the thick, jointed culm on which it grew could belong only to E. interstincta, a species not only new to Connecticut, but known from only three other places in New England.

If this be boasting, it is boasting of the locality, not of the collectors; and it is also an invitation. Only half of Long Pond has been explored; when we last saw it, the boat and the half oar were waiting. And

the pond lies in a belt of more or less similar country which apparently extends along the western border of Rhode Island all the way from Westerly to a point near Webster, Massachusetts. Any part of it is likely to repay exploration.

East Hartford, Connecticut.

BROMELICA (THURBER): A NEW GENUS OF GRASSES.

OLIVER ATKINS FARWELL.

For some years past our eastern species of Oat Grass have been bandied about between Avena and Melica, affording for some a merry game of shuttlecock. These species appear to have no permanent home and to be a restless group, that, like Banquo's Ghost, will not down. It seems best, therefore, to create a new genus for them. At least one of that small group of grasses, to which belong our eastern Oat Grasses, has been included at one time or another in five different genera, Festuca, Bromus, Melica, Avena and Trisetum. As regards our eastern species Michaux first described Avena striata in 1803; Torrey next described it as Trisetum purpurascens; A. Gray replaced it in Avena using Michaux's name; Hitchcock then removed it to Melica as M. striata; finally Nash restored it to Avena as A. Torreyi. The second species was described by Porter in 1867 as Avena Smithii and it was removed to Melica by Vasey in 1888. At the present time Hitchcock, in Gray's Manual, lists these species under Melica; Britton & Brown in the Illustrated Flora list them under Avena; Rydberg in the Flora of the Rocky Mountains steers an intermediate course listing the first under Avena and the second under Melica. When authors are at such wide variance with each other in their treatment of such closely related species, the probabilities are that the species do not belong to any one of the genera to which they have been referred. A careful analysis of the distinguishing characters of each genus bears out this supposition.

These species can scarcely belong to Avena since they lack the most important tribal characters distinctive of the Aveneae, viz.: the spine-like end of the rachilla prolonged behind the uppermost floret and glumes longer than the lower floret. They do agree with the Festuceae